

Claims

What is claimed:

1. A method of fabricating an electro-optical device suitable for use in an image forming system, the method comprising the steps of
 - 5 imbedding a sensor in a substrate to form a sensor area and a non-sensor area;
 - applying a first filter layer on at least a portion of the non-sensor area to at least partially planarize the device; and
 - applying a second filter layer over at least a portion of the substrate without removing the first filter layer on the non-sensor area.
- 10 2. The method of claim 1, further comprising the step of applying a base layer on the substrate before the step of applying a first filter layer.
3. The method of claim 1, wherein, in the step of applying a base layer, the base layer is translucent.
- 15 4. The method of claim 1, further comprising the step of mounting the electro-optical device in an image forming system.
- 20 5. The method of claim 1, wherein, in the steps of applying, at least one of the first and second filter layers contains a pigment.

6. The method of claim 1, further comprising the step of applying a second filter layer on at least a portion of a second non-sensor area to at least partially planarize the device.

5 7. The method of claim 6, further comprising the step of applying a third filter layer over at least a portion of the substrate without removing the second filter layer on the second non-sensor area.

8. The method of claim 7, wherein, in the steps of applying, the first filter layer 10 corresponds to a first primary color, the second filter layer corresponds to a second primary color, and the third filter layer corresponds to a third primary color.

9. A method of making a photosensitive chip for image sensing, the method comprising the steps of:

15 imbedding a photosensor in a substrate of a photosensitive chip;
covering a sensor area with a filter layer, the sensor area substantially overlying the photosensor;
permanently covering a non-sensor area with the filter layer to at least partially planarize a surface of the photosensitive chip, the non-sensor area not substantially 20 overlying the photosensor; and
applying a second filter layer over at least a portion of the substrate.

10. The method of claim 9, further comprising the step of applying a base layer on the substrate before the step of covering.

11. A method of applying a filter layer of substantially uniform thickness for an image forming system, the method comprising the steps of

providing a wafer containing at least two photosensors; and

5 applying a first filter layer on at least a portion of a non-sensor area of the wafer for applying a second filter layer of substantial uniform thickness over the at least two photosensors.

12. The method of claim 11, further comprising the step of applying a base layer on

10 the wafer before the step of applying.

13. An electro-optical device suitable for use in an image forming system, the device comprising

a substrate;

15 a sensor embedded in the substrate forming a sensor area and a non-sensor area;

a first filter layer on at least a portion of the non-sensor area to at least partially planarize the device; and

20 a second filter layer applied over at least a portion of the substrate without removing the first filter layer on the at least a portion of the non-sensor area.

14. The electro-optical device of device of claim 13, further comprising a base layer on the substrate.